

CLAIMS

What we claim is:

5 1. A method of changing the surface wettability of polymer materials, characterized in that:

it comprises of rubbing the surface of the polymer materials by using sand paper with a predetermined pressure at the ambient temperature, so as to change the contact angle of said surface of polymer material with water thereby changing the surface wettability of the polymer materials to different degrees.

10 2. The method of claim 1, characterized in that: the pressure is 4000 to 7000 Pa, and

the grade of the sand paper is #80, and the rubbing times are 5-10;

15 the grade of the sand paper is #100, and the rubbing times are 5-10;

the grade of the sand paper is #120, and the rubbing times are 5-10;

the grade of the sand paper is #180, and the rubbing times are 5-10;

the grade of the sand paper is #240, and the rubbing times are 5-10;

the grade of the sand paper is #300, and the rubbing times are 5-10; or

20 the grade of the sand paper is #360, and the rubbing times are 5-10.

3. The method of claim 1, characterized in that: the pressure is 7000 to 8000 Pa, and

the grade of the sand paper is #500, and the rubbing times are 5-10; or

25 the grade of the sand paper is #600, and the rubbing times are 5-10.

4. The method of claim 1, characterized in that:

the pressure is 8000 to 9000 Pa, the grade of the sand paper is #1200, and the rubbing times are 5-20.

5. The method of claim 1, characterized in that:

the pressure is 8000 to 9000 Pa, the grade of the sand paper is #1500, and the rubbing times are 5-20.

5 6. The method of claim 1, characterized in that:

the polymer material is selected from polycarbonate substrate, polymethyl methacrylate substrate, polystyrene substrate, polytetrafluoroethylene substrate and polyvinyl alcohol substrate.

10 7. The method of claim 1, characterized in that:

the change of the contact angle of the polymer materials with water is 10° to 50°.